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Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

COVID-19 Evidence Synthesis: International review of guidance on the use of face masks to mitigate the spread of SARS-CoV-2 infection

30 November 2022

About the Health Information and Quality Authority (HIQA)

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HIQA's mandate to date extends across a wide range of public, private and voluntary sector services. Reporting to the Minister for Health and engaging with the Minister for Children, Equality, Disability, Integration and Youth, HIQA has responsibility for the following:

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- **National Care Experience Programme** — Carrying out national service-user experience surveys across a range of health services, in conjunction with the Department of Health and the HSE.

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List of abbreviations used in this report

| | |
|-------------------|--|
| CAG | COVID-19 Advisory Group |
| CDC | Centers for Disease Control and Prevention |
| COVID-19 | Coronavirus Disease 2019 |
| ECDC | European Centre for Disease Prevention and Control |
| FFP2 | Filtering Face Piece 2 |
| FFP3 | Filtering Face Piece 3 |
| FRSM | Fluid Resistant Surgical Masks |
| HIQA | Health Information and Quality Authority |
| HSE | Health Service Executive |
| RSV | Respiratory Syncytial Virus |
| SARS-CoV-2 | Severe Acute Respiratory Syndrome Coronavirus 2 |
| WHO | World Health Organization |

Acknowledgements

Members of the Evaluation Team

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Not all members of the Evaluation Team are involved in the response to each research question.

Conflicts of interest

None declared.

Key points

- This review presents a synthesis of current guidance and planned changes to guidance on the use of face masks to mitigate the spread of SARS-CoV-2 infection. Data (published up to 30 November 2022) were extracted from three organisations (European Centre for Disease Prevention and Control (ECDC), World Health Organization (WHO) and the US Centers for Disease Control and Prevention (CDC) and 22 countries (Australia, Austria, Belgium, Czechia, Denmark, England, Finland, France, Germany, Ireland, Israel, Italy, the Netherlands, New Zealand, Northern Ireland, Norway, Portugal, Scotland, Singapore, Spain, Sweden and Wales).

Current guidance in place: Organisations

- With respect to **settings** in which face masks should be used, the ECDC and WHO recommend that where the public health objective is to address community transmission of COVID-19, wearing a face mask should be considered in indoor public spaces, or in crowded outdoor settings where physical distancing of at least one metre cannot be maintained. Guidance published by the US CDC, based on a tool called the "COVID-19 Community Levels", recommends that at all COVID-19 community risk levels, face masks should be worn in indoor public transportation settings and may be required in other places by local or state authorities.
- With respect to the **type of face mask** that should be used, the ECDC recommends that if an individual tests positive for COVID-19 or shows symptoms, they and their household members should consider wearing a medical face mask or respirator in the household. Guidance from the US CDC recommends that at all COVID-19 community risk levels, those who test positive for COVID-19 should wear a high-quality face mask if they must be around others at home or in public. High-quality face masks or respirators are also recommended for those at risk and close contacts at "Medium Level" or "High Level". The guidelines further recommend that at "High Level", all individuals should consider wearing a high-quality face mask or respirator indoors in public places.

Current guidance in place: Countries

- Each of the 22 countries, with the exception of Czechia and Sweden, have guidance in place for the use of face masks in a range of settings. The guidance can be broadly categorised into guidance outlining where face mask use is a mandatory requirement and guidance which is limited to

recommendations on face mask use. Eleven countries included in this review include a mix of both mandatory requirements and recommendations, and another nine countries provide recommendations only.

- With respect to **public transport**:
 - Mandatory requirements for face mask use were identified for three countries (Germany, Singapore and Spain). Of note, Germany specifically mandates the use of FFP2 masks on long-distance public transport.
 - Nine countries outline recommendations for face mask use (Australia, Austria, Finland, France, Germany, Ireland, New Zealand, Northern Ireland and Scotland). Five countries (France, Ireland, New Zealand, Northern Ireland and Scotland) recommend use of face mask by the general public on all forms of public transport. Germany recommends that medical masks be used as an alternative to FFP2 masks by children (age six to thirteen years) and transport staff. Other countries specify the instances where a specific type of mask should be used (Austria recommends that individuals who test positive for SARS-CoV-2 should wear an FFP2 mask when on public transport) or when a face mask should be used (Finland recommends people use a face mask on public transport if they require treatment or are testing for suspected COVID-19, if they have symptoms of respiratory infection, or if they have been exposed to COVID-19; Australia recommends their use at “Tier 1” of the national framework for COVID prevention).

- With respect to visitors and users of **health and social care settings**:
 - Ten countries mandate the use of facemasks (Austria, Belgium, France, Germany, Israel, New Zealand, Portugal, Scotland, Singapore and Spain). Some countries provide additional details on the specific instances within healthcare settings when they are required (Spain requires their use by visitors and people admitted when they are sharing common spaces outside their room; Israel requires their use by visitors in any closed area where a resident is staying). Other countries specify the exact healthcare setting in which face masks must be worn, for example in hospitals (Austria, Belgium, France, Germany, New Zealand, Scotland, Singapore), in nursing homes or residential centres (Austria, Portugal, Singapore). The guidance from Austria specifies that an FFP2 mask must be worn, and the guidance from Scotland specifies that a Fluid Resistant Surgical Mask (FRSM) must be worn in healthcare settings.

- Ten countries (Australia, Belgium, Denmark, England, Finland, France, Ireland, Italy, Northern Ireland and Wales) provide recommendations for the use of face masks by visitors and in certain circumstances service users in a diverse range of health and social care settings, with differences between countries in the exact locations specified. Denmark limits the recommendation to individuals with respiratory symptoms who are attending for care. In Australia, the wearing of face masks by visitors to aged care and disability residential care settings is recommended at “Tier 1” and “Tier 2” of the national framework for COVID prevention and is at the discretion of the facility at base level. In England, visitors in care settings are encouraged to wear a face mask, especially when in communal areas.
- With respect to **crowded spaces** recommendations from seven countries (Belgium, Israel, Northern Ireland, New Zealand, Portugal, Scotland and Singapore) state that members of the general public should wear a face mask in crowded spaces (both indoors and outdoors) and in enclosed spaces with poor ventilation.
- With respect to **individuals at increased risk of severe COVID-19 outcomes**, guidance from France, Ireland and Norway recommends the use of face masks in crowded spaces (both indoors and outdoors) and in enclosed spaces with poor ventilation. Five countries (Australia, Finland, the Netherlands, New Zealand and Spain) recommend that those at increased risk of severe COVID-19 outcomes should consider wearing a face mask but do not provide further detail on specific settings. Guidance published in seven countries (Australia, England, France, Ireland, New Zealand, Portugal and Singapore) includes a recommendation that face masks should be worn by members of the general public when they are in the company of those at higher risk of severe COVID-19 outcomes.
- With respect to individuals who have **tested positive for COVID-19, those who are symptomatic, and close contacts**, a range of mandatory requirements and recommendations regarding the use of face masks or the type of face mask were identified.
 - Guidance from Italy mandates the use of FFP2 or FFP3 face masks by people who are showing symptoms of COVID-19.

- The use of face masks is recommended for people who test positive for COVID-19 in Austria, Denmark, Finland, France and Ireland. The guidelines for Austria recommend an FFP2 mask is worn, while the guidelines for Ireland recommend a medical mask or respirator is worn in this situation.
- Five countries recommend the use of face masks for people who are showing symptoms (Denmark, Finland, France, Norway and Wales) while three countries recommend the use of face masks for people who are a close contact of somebody who tests positive for COVID-19 (Australia, Finland and New Zealand).

Guidance to be implemented to limit the impact of COVID-19 surges:

- Planned changes to public health guidance on the use of face masks in the event of COVID-19 surges were identified for nine countries (Australia, Austria, Denmark, England, Finland, Germany, Ireland, Norway and Scotland). The guidance for each country states that depending on the threat level posed, mandatory requirements for face masks or recommendations for their use may be introduced.
- Guidance for Australia, Germany and Scotland states that a face mask requirement for a range of public indoor settings (particularly when physical distancing cannot be maintained) and on public transport will be introduced, if necessary.
- The information relating to current and planned changes to guidance on the use of face masks to mitigate the spread of SARS-CoV-2 infection, included in this international review is correct as of 30 November 2022, but may be subject to change.

1 Background

Coronavirus disease 2019 (COVID-19), which is caused by the SARS-CoV-2 virus, typically spreads through the air in respiratory droplets that come from the nose and or mouth of an infected person. Wearing a face mask can help reduce the release of these droplets from infected individuals who are not aware they are infected, have not yet developed any symptoms, or have mild non-specific symptoms. Since the onset of the COVID-19 pandemic, the use of face masks in public places has been recommended by a number of countries to limit the transmission of SARS-CoV-2, with several jurisdictions introducing mandatory face mask wearing in settings such as public transport or shops at the peak of the pandemic. In Ireland, the mandatory requirement to wear face masks was removed on 28 February 2022. The public health advice remains that face masks should continue to be worn on public transport and in healthcare settings.⁽¹⁾

Face mask grades include respirators and or filtering face piece 2 (FFP2) masks, medical face masks and cloth face masks. The proper use of face masks may reduce transmission, lessening the societal impact associated with absence from work or healthcare pressures due to infection, and protect vulnerable individuals in particular settings.⁽²⁾ During autumn and winter, there is an increased risk of a combined surge of COVID-19 and another respiratory viral illness (such as, influenza or respiratory syncytial virus (RSV)). Our previous international review of planned public health measures and strategies to limit the impact of COVID-19 surges (available [here](#)) identified the use of face masks as a strategy to limit the transmission of SARS-CoV-2 infection.

At the request of the Department of Health, the Health Information and Quality Authority (HIQA) COVID-19 Evidence Synthesis Team undertook an international review of guidance on the use of face masks to mitigate the spread of SARS-CoV-2 infection to inform the work of the COVID-19 Advisory Group (CAG).

2 Methods

The detailed methods used for this review are provided in the protocol: An international review of guidance on the use of face masks to mitigate the spread of SARS-CoV-2 infection, available [here](#). In brief, this review presents a synthesis of current and planned changes to public health guidance regarding the use of face masks in various settings to limit the spread of SARS-CoV-2 infection from three organisations, the European Centre for Disease Prevention and Control (ECDC), World Health Organization (WHO) and US Centers for Disease Control and Prevention (CDC), and 22 countries. The countries included were selected based on

a combination of geographical proximity to Ireland, population size, European Union membership, current epidemiological situation, and or availability of documents in English. The countries comprise 13 EU/EEA countries (Austria, Belgium, Czechia, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Portugal, Spain, Sweden), the UK (England, Northern Ireland, Scotland and Wales) and Australia, New Zealand, Israel and Singapore. Data for Ireland were also extracted to facilitate comparisons.

Information on current national-level public health guidance regarding the use of face masks in various settings to limit the spread of SARS-CoV-2 infection was primarily sought from government resources (websites, reports and press releases). Additionally, public health plans for a change in guidance on the use of face masks, in the event of COVID-19 surges, were included. Information on the use of face masks in healthcare settings by patients and members of the general public was included, but information on the use of face masks by healthcare workers in healthcare settings was considered outside the scope of the review. Information on guidance at a regional and or local level was also considered outside the scope of this review.

3 Results

3.1. Current guidance in place

An overview of the international guidance on the use of face masks to mitigate the spread of SARS-CoV-2 infection is provided in Table 1. The specific mandatory requirements and recommendations from each organisation and country are described in greater detail below.

The guidance on the use of face masks to mitigate the spread of SARS-CoV-2 infection can be categorised as either mandatory requirements or recommendations. The three organisations included in the review (ECDC,⁽²⁾ WHO⁽³⁾ and US CDC⁽⁴⁾) provide recommendations only. Eleven countries include a mix of both mandatory requirements and recommendations (Austria,⁽⁵⁾ Germany,⁽⁶⁾ Israel,^(7, 8) Italy,⁽⁹⁾ New Zealand,^(10, 11) Portugal,⁽¹²⁾ Scotland,^(13, 14) Spain⁽¹⁵⁾ and Singapore^(16, 17)), and nine countries provide recommendations only (Australia,⁽¹⁸⁾ Belgium,⁽¹⁹⁾ Denmark,⁽²⁰⁾ England,⁽²¹⁾ Finland,⁽²²⁾ France,⁽²³⁾ Ireland,^(1, 24) the Netherlands,⁽²⁵⁾ Norway,⁽²⁶⁾ Northern Ireland⁽²⁷⁾ and Wales⁽²⁸⁾).

Guidance from the ECDC⁽²⁾ and the WHO⁽³⁾ recommends that the general public (age 12 years or older) should wear a face mask in settings where the public health objective is to address community transmission of SARS-CoV-2. Both organisations

recommend that this should be considered in indoor public spaces, or in crowded outdoor settings where physical distancing of at least one metre cannot be maintained. The guidance published by the ECDC offers an additional option to focus on the use of face masks in specific settings (such as care settings) to protect vulnerable people.⁽²⁾ If an individual tests positive for COVID-19 or shows symptoms, they and their household members should consider wearing a medical face mask or respirator in the household. Similar recommendations are included in the guidance published by the WHO, but these recommendations were under review at the time of publication.⁽³⁾ Additionally, another recommendation (also under review at the time of publication) is included in the guidance published by the WHO that states, where there is known or suspected community transmission, children aged six to eleven years should wear a mask in indoor settings if physical distancing cannot be maintained.

Guidance published by the US CDC is based on a tool called the "COVID-19 Community Levels".⁽⁴⁾ This tool is used by the US to decide what prevention measures should be taken based on county-level data, with the level of response categorised as low, medium or high level. These levels are determined by data on hospitalisation numbers and cases within the community. At all COVID-19 community levels, face masks are recommended (but not mandated) in indoor public transportation settings and may be required in other places by local or state authorities. It is recommended that those who test positive for COVID-19 should wear a high-quality face mask if they must be around others at home or in public, and they should not go to places where they are unable to wear a face mask. At "Medium Level" or "High Level", it is recommended that those at high risk of severe COVID-19 outcomes, and close contacts of positive COVID-19 cases should wear a high-quality face mask or respirator. At "High Level", it is recommended that all individuals should consider wearing a high-quality face mask or respirator indoors in public places.

Frameworks for responding to COVID-19 have been published in Australia,⁽¹⁸⁾ Germany,⁽⁶⁾ and Scotland⁽²⁹⁾ (Table 2). These frameworks represent a suite of measures, including face masks, to mitigate risks associated with COVID-19 for various threat levels. In Australia and Scotland, deciding what threat level should apply at a given time involves both an assessment of the epidemiological context and the application of judgment.^(18, 29) The frameworks outline that necessary and proportionate protective measures should be selected when appropriate and that not all protective measures may be required at the same time across different settings. The framework for Australia⁽¹⁸⁾ has three levels "Base level", "Tier 1" and "Tier 2". In the framework for Germany,⁽⁶⁾ the measures for responding to COVID-19 are divided into two stages. At "Stage 1", possible further measures may be enacted to ensure

the functioning of the health system or other critical infrastructure. At “Stage 2”, measures may be ordered if a state parliament identifies a concrete threat to the functioning of the health system or other critical infrastructure for the entire federal state or in certain regions. The framework for Scotland⁽²⁹⁾ has three threat levels, “Low”, “Medium”, and “High”. The specific recommendations pertaining to the use of face masks within frameworks, are described under each country below.

With respect to public transport, countries differ in their approach to face mask requirements. Information on guidance at a regional and or local level was considered outside the scope of this review. Germany,⁽⁶⁾ Singapore⁽¹⁶⁾ and Spain⁽¹⁵⁾ mandate the use of face masks on public transport. Meanwhile, the use of face masks on public transport is included as a recommendation (not mandated) in guidance published for Australia,⁽¹⁸⁾ Austria,⁽⁵⁾ Finland,⁽²²⁾ France,⁽²³⁾ Germany,⁽⁶⁾ Ireland,⁽²⁴⁾ New Zealand,⁽¹¹⁾ Northern Ireland⁽²⁷⁾ and Scotland⁽¹³⁾.

Considering the use of face masks by members of the general public in various health and social care settings, a mandatory requirement was identified for Austria,⁽⁵⁾ Belgium,⁽¹⁹⁾ France,⁽²³⁾ Germany,⁽⁶⁾ Israel,⁽⁷⁾ New Zealand,⁽¹⁰⁾ Portugal,⁽¹²⁾ Scotland,⁽¹⁴⁾ Singapore⁽¹⁶⁾ and Spain,⁽¹⁵⁾ see Table 2. The type of healthcare settings specified includes hospitals (Austria,⁽⁵⁾ Belgium,⁽¹⁹⁾ France,⁽²³⁾ Germany,⁽⁶⁾ New Zealand,⁽¹⁰⁾ Portugal,⁽¹²⁾ Scotland⁽¹⁴⁾ and Singapore⁽¹⁶⁾), GP surgeries (Belgium⁽¹⁹⁾), residential care homes (Austria,⁽⁵⁾ Portugal,⁽¹²⁾ Singapore⁽¹⁶⁾), pharmacies (Belgium,⁽¹⁹⁾ France⁽²³⁾), and ambulances (Singapore⁽¹⁶⁾). The type of face mask required is not specified, with the exception of Austria,⁽⁵⁾ and Scotland,⁽¹⁴⁾ which state that an FFP2 and FRSM mask are required, respectively. Recommendations (not mandated) on the use of face masks by the general public in certain health and social care settings were identified for eight countries (Australia,⁽¹⁸⁾ Belgium,⁽¹⁹⁾ Denmark,⁽²⁰⁾ France,⁽²³⁾ Ireland,⁽¹⁾ Italy,⁽⁹⁾ Northern Ireland,⁽²⁷⁾ Wales⁽²⁸⁾), see Table 2. The type of healthcare settings include hospitals for older people (France⁽²³⁾) surgeries (Denmark⁽²⁰⁾), residential care facilities (Australia⁽¹⁸⁾, Belgium⁽¹⁹⁾), and healthcare settings in general (Ireland,⁽¹⁾ Italy,⁽⁹⁾ Northern Ireland,⁽²⁷⁾ Wales⁽²⁸⁾).

The guidance for Belgium,⁽¹⁹⁾ Israel,⁽⁷⁾ Northern Ireland,⁽²⁷⁾ New Zealand,⁽¹¹⁾ Portugal,⁽¹²⁾ Scotland,⁽¹³⁾ and Singapore⁽¹⁶⁾ includes recommendations (not mandated) that members of the general public should wear a face mask in crowded spaces (both indoors and outdoors) and in enclosed spaces with poor ventilation. This recommendation is included in the guidance for France,⁽²³⁾ Ireland⁽¹⁾ and Norway⁽²⁶⁾ for people at risk of severe COVID-19 outcomes only.

The guidance for Australia,⁽¹⁸⁾ Finland,⁽²²⁾ the Netherlands,⁽²⁵⁾ New Zealand⁽¹¹⁾ and Spain⁽¹⁵⁾ includes a recommendation that those at risk of severe COVID-19 outcomes should consider wearing a face mask, with no detail provided on the specific settings

to which this recommendation applies. Guidance published in Australia,⁽¹⁸⁾ England,⁽²¹⁾ France,⁽²³⁾ Ireland,⁽¹⁾ New Zealand,⁽¹¹⁾ Portugal⁽¹²⁾ and Singapore⁽¹⁶⁾ includes a recommendation that face masks should be worn by members of the general public when they are in the company of those at higher risk of severe COVID-19 outcomes.

Guidance on the use of face masks was identified for those who test positive for COVID-19, those who are showing symptoms of COVID-19 and close contacts of COVID-19 cases. The use of face masks is recommended for people who test positive for COVID-19 in Austria,⁽⁵⁾ Denmark,⁽²⁰⁾ Finland,⁽²²⁾ France⁽²³⁾ and Ireland.⁽¹⁾ With respect to the type of mask, the guidelines for Austria⁽⁵⁾ recommend an FFP2 mask is worn while the guidelines for Ireland⁽¹⁾ recommend a medical or respiratory mask is worn in this situation. Guidelines for Italy⁽⁹⁾ mandate the use of an FFP2 or FFP3 mask by people who are showing symptoms of COVID-19. The use of face masks for people who are showing symptoms is included as a recommendation (not mandated) for Denmark,⁽²⁰⁾ Finland,⁽²²⁾ France,⁽²³⁾ Norway⁽²⁶⁾ and Wales.⁽²⁸⁾ The use of face masks is recommended for people who are a close contact of somebody who tested positive for COVID-19 in Australia⁽¹⁸⁾, Finland⁽²²⁾ and New Zealand.⁽¹¹⁾

Guidance on the use of face masks to mitigate the spread of SARS-CoV-2 infection was not identified for two countries, Czechia and Sweden (Table 2).^(30, 31) In Czechia,⁽³¹⁾ all measures to limit the spread of SARS-CoV-2 were cancelled with effect from 1 May 2022. In Sweden,⁽³⁰⁾ as of 1 April 2022, no further COVID-19 public health measures or strategies are in place in relation to face masks, but protecting the elderly and vulnerable is encouraged.

Table 1: Overview of international guidance on the use of face masks (correct as of 30 November 2022)

| Country | Community health care | Public transport | Suspected or confirmed COVID-19 | Public spaces (indoors) | Public spaces (outdoors) | Additional settings or populations | Surge plan guidance (e.g. during high transmission) |
|------------------------------------|---|--------------------|-----------------------------------|-------------------------|-----------------------------------|--------------------------------------|---|
| Austria ⁽⁵⁾ | FFP2 | - | FFP2 | - | - | - | Possibility of additional settings |
| Australia ⁽¹⁹⁾ | Note 1: Any face mask and it is discretionary | - | Any face mask | HRI | HRI | RR and CC in workplaces | Note 4: Possibility of additional settings |
| Belgium ⁽⁶⁾ | Note 2: Any face mask | - | - | When crowded | When crowded | - | - |
| Czechia ⁽³¹⁾ | - | - | - | - | - | - | - |
| Denmark ⁽²⁰⁾ | Any face mask | - | | - | - | - | Possibility of additional settings |
| England ^(21, 37) | Any face mask: visitors | - | - | - | - | When with HRI | In crowded enclosed spaces |
| Finland ⁽²²⁾ | Any mask: Regional discretion | For close contacts | When symptomatic or CC | HRI and unvaccinated | HRI and unvaccinated | Discretionary by workplace | Individuals based on personal risk |
| France ⁽²³⁾ | Any face mask | During peak hours | | When crowded | - | FFP2 an option for HRI | - |
| Germany ^(7, 34) | Medical mask | On long journeys | - | - | - | Workplace: following risk assessment | Note 5: Possibility of additional settings |
| Ireland ^(1, 24) | Medical mask | Medical mask | Sharing a room at home, or for RR | Medical mask for HRI | Medical mask for HRI when crowded | When with HRI | Possibility in certain settings |
| Israel ^(8, 9) | Any face mask | - | - | | - | - | |

| | | | | | | | |
|---|--------------------------------|------------------|-------------------------------|------------------------------------|--------------------------------|----------------------------------|--|
| Italy ⁽¹⁰⁾ | Respiratory mask | - | FFP2: When symptomatic | - | - | - | - |
| Netherlands ⁽²⁵⁾ | Medical mask | - | - | Discretionary | - | FFP2 for HRI in all settings | - |
| New Zealand ^(11, 12) | Any face mask | Any face mask | - | When crowded and poorly ventilated | When crowded | Discretionary for other settings | - |
| Northern Ireland ⁽²⁷⁾ | Any face mask | Any face mask | - | Any face mask | - | - | - |
| Norway ⁽²⁶⁾ | - | - | Any face mask: When with HRIs | - | - | Note 3: HRI and unvaccinated | Possibility of additional settings |
| Portugal ⁽¹³⁾ | Any face mask | HRI when crowded | - | When crowded, particularly HRI | When crowded, particularly HRI | - | - |
| Scotland ^(14, 15) | Surgical mask (IIR) | Any face mask | Any face mask | Any face mask | - | - | Note 6: Indoor spaces and public transport |
| Singapore ^(17,18) | Any face mask | Any face mask | - | When crowded | When crowded | HRI in all crowded settings | - |
| Spain ⁽¹⁶⁾ | Any face mask in shared spaces | Any face mask | - | - | - | HRI in all settings | - |
| Sweden ⁽³⁾ | - | - | - | - | - | - | - |
| Wales ⁽²⁸⁾ | Any face mask | - | When indoors | - | - | - | - |

Key: CC – close contact of a confirmed COVID-19 case; HR – high risk; HRI – high risk individual who is at higher risk of severe illness from COVID-19; RR – recently recovered from COVID-19

Legend: Mandatory Conditional mandatory Recommended Conditional recommendation Asked to consider

Note 1: Visitors not required to wear masks. However, facilities will assess their own risk and may require visitor face mask wearing.

Note 2: Mandatory for hospitals, surgeries (at the doctor’s office) and pharmacies. Recommended in residential care centres, dental, physiotherapist, psychologist or speech therapist practices.

Note 3: Any face mask for people in at-risk groups and unvaccinated people during periods of widespread transmission when physical distancing is not possible.

Note 4: In addition to Base Level recommendation. The following recommendations for face mask use are planned for periods of high transmission (Tier 1): face masks on public transport, in high-risk settings and for visitors to aged care and disability residential care settings, and indoor settings; surgical masks or respirators (N95) in public settings for individuals at higher risk; face mask wearing for staff in the business sector. Surge plans for 'Tier 2' transmission levels recommend: face mask wearing in a range of additional public settings.

Note 5: Federal states can implement mandatory requirements for face mask wearing in indoor public spaces and all public transport. When circulation is high, mandatory mask wearing can be implemented with parliamentary approval for outdoor events without physical distancing and in schools from 5th school year (high school) and higher, in order to keep schools operating in-person.

Note 6: Surge plans for periods of high transmission - Low threat: Potential to recommend for certain settings (no further details published). Medium threat: Potential to mandate mask wearing on public transport and for indoor public spaces.

Organisations

European Centre for Disease Prevention and Control

Guidance from the ECDC,⁽²⁾ published on 7 February 2022, states that in areas where the public health objective is to reduce the ongoing community transmission of SARS-CoV-2, wearing a medical face mask, respirator, or non-medical face mask, should be considered in confined public spaces (such as stores, supermarkets, transportation hubs and when using public transport). The guidance also states that wearing a face mask should be considered in crowded outdoor settings where physical distancing is not possible. It is also recommended that face masks are used in specific settings to protect people at increased risk of severe COVID-19 outcomes from (see Appendix 1). In this instance, face masks can be recommended both for vulnerable people and for people regularly interacting with them (for example, in care settings).

The guidance provides additional recommendations on the type of face mask that should be used under certain circumstances. The use of a respirator (if available and tolerated) is recommended for people vulnerable to severe COVID-19 outcomes (see Appendix 1). Respirators are also recommended for both COVID-19 cases who cannot isolate for the full recommended isolation period and for high-risk contacts of COVID-19 cases who cannot remain in quarantine for the full recommended quarantine period. It is recommended that the use of a medical face mask or a respirator should be considered in households for people with symptoms of COVID-19 or confirmed COVID-19, and for the people who share their household, especially when it is not possible for the person with symptoms of or confirmed COVID-19 to isolate.

The appropriate use of face masks is highlighted in the guidance. When non-medical face masks are used, individuals are advised to choose those that comply with available standards for filtration efficacy and breathability.⁽³²⁾

World Health Organization

Guidance from the WHO,⁽³⁾ published on 7 March 2022, strongly recommends that in settings where there is community or cluster transmission of SARS-CoV-2, irrespective of vaccination status or history of prior infection, the general public should wear a well-fitting face mask (that covers the nose and mouth) when interacting with individuals who are not members of their household. This is recommended in indoor settings with poor ventilation, and in indoor and outdoor settings where physical distancing of at least one metre cannot be maintained. Face mask types recommended include disposable medical masks or non-medical face

masks that meet the minimum thresholds related to three WHO essential parameters of fit, filtration and breathability. If these are not available, other types of well-fitting non-medical face masks including homemade multi-layered face masks are acceptable.

Included in the guidance are a number of recommendations for the general public that were under review at the time of publication. These include the recommendation that in any transmission scenario, persons with any symptoms suggestive of COVID-19 should wear a medical face mask. Where a medical face mask is not available, a fabric face mask with fit, filtration and breathability assessed to meet the WHO essential parameters for non-medical face masks should be worn. Also included is a recommendation that persons with suspected COVID-19 or mild COVID-19 symptoms should wear a medical face mask as much as possible, especially when there is no alternative to being in the same room with other people. Caregivers of, or those sharing living spaces with, people with suspected COVID-19 or mild COVID-19 symptoms should wear a medical face mask when in the same room as the affected person. Exhalation valves on respirators and non-medical face masks are discouraged as they do not allow for adequate source control from the wearer, and face shields should not be considered an equivalent to face masks with respect to respiratory protection and or source control.

The guidance provides additional detail with respect to recommendations for children. Adolescents aged 12 years or older should follow the same recommendations as adults for face mask use. In areas where there is known or suspected community transmission, face masks are recommended for use in children ages six to eleven in indoor settings if physical distancing of at least one metre cannot be maintained. The guidance notes that children aged five years should not be obliged to wear face masks. Similarly, children with cognitive or respiratory impairments, developmental disorders, disabilities (as defined by the Convention on the Rights of Persons with Disabilities), or other specific health conditions who experience difficulties wearing a face mask, or have health conditions that interfere with face mask wearing should not be obliged to wear a face mask.

US Centers for Disease Control and Prevention

Guidance from the US CDC⁽⁴⁾, published on 9 September 2022, recommends that those who test positive for COVID-19 should wear a high-quality face mask if they must be around others at home or in public and they should not go to places where they are unable to wear a face mask.

In the US, a tool called the "COVID-19 Community Levels" is used to help communities decide what prevention steps they should take based on the latest data

relating to the number of hospitalisations and positive cases. For each Level, people may choose to wear a face mask at any time. Face masks are recommended on indoor public transportation and may be required in other places by local or state authorities. At "Medium Level" or "High Level", it is recommended that those who are at high risk of severe COVID-19 outcomes, should wear a high-quality face mask or respirator (see Appendix 1). Additionally, those who have household or social contact with someone at high risk of severe COVID-19 outcomes should consider self-testing and wearing a face mask when indoors with them. At "High Level", individuals should wear a high-quality face mask or respirator and those who are at high risk of severe COVID-19 outcomes should consider avoiding non-essential indoor activities in public places (see Appendix 1).

It is recommended that children aged two years and older can wear face masks or respirators to protect themselves and others from COVID-19. A high-quality and comfortable face mask or respirator should be chosen so that the child can wear it properly. Parents and caregivers are advised to seek medical advice relating to face mask and respirator wearing, if a child in their care has a medical condition, such as a heart or lung problem.

The guidance highlights that certain groups of people may find it difficult to wear a face mask, including people of any age with certain disabilities. Challenges may be caused by being sensitive to materials on the face, difficulty understanding the importance of face mask wearing for protection, or having difficulty controlling the behaviour required to keep the face mask in place. It is recommended that people with certain disabilities and or their caregivers assess whether they need to wear a face mask. They should do this by considering the person's ability to wear a face mask correctly. The use of clear face masks or a cloth face mask with a clear panel should be considered when communicating with people who are deaf or hard of hearing.

EU/EEA

Austria

As of 1 August 2022, people who test positive for SARS-CoV-2, are recommended to wear an FFP2 mask in a range of settings. These include indoors (if in contact with other people) and outdoors (if a minimum distance of two metres from other people cannot be maintained), on public transport, in private transport (if travelling with other people), and in their private homes if gathering with people from different households (if a minimum distance of two meters from other people cannot be maintained).⁽⁵⁾ There is also a mandatory FFP2 mask requirement regardless of COVID-19 status, that applies to enclosed spaces of hospitals and health facilities,

residential and nursing homes and places where health and care services are provided.

Belgium

As of 23 May 2022, face masks are mandatory in hospitals, doctors' offices and pharmacies.⁽¹⁹⁾ However, wearing a face mask is still recommended in very busy places or in healthcare environments such as residential care centres or at a dental, physiotherapist, psychologist or speech therapist practices.

Czechia

On 1 May 2022, all emergency measures (including the use of face masks) to limit the spread of SARS-CoV-2 were cancelled in Czechia.⁽³¹⁾

Denmark

As of 16 May 2022, The Danish Health and Medicines Authority recommends that face masks be used if an individual has tested positive for COVID-19 or has significant symptoms and they need to leave their private home (for example, to get treatment).⁽³³⁾ It is also recommended that face masks are worn when getting tested for COVID-19, and when attending general practice, the emergency doctor and ear, nose and throat specialists (if they have respiratory symptoms).

Finland

As of 30 September 2022, guidance in Finland recommends that people use face masks and keep their distance from other people at their own discretion. Wearing face masks and social distancing (that is, keeping a distance of two metres) in indoor public spaces and on public transport is recommended specifically for those requiring treatment and or testing for suspected COVID-19, those who have symptoms of respiratory infection who need to leave their private home, and those who know they have been exposed to COVID-19 but need to leave their private home. The guidance highlights that those who are 15 years of age or older and unvaccinated, as well as all those who are at risk of severe COVID-19 outcomes (see Appendix 1), should consider using a type of face mask that protects the user effectively. Information on the different face masks available (for example, medical masks and respirators) is provided, but there is no information on which type of mask should be used in specific situations.⁽²²⁾

Guidance on the use of masks, in general, is controlled by the Finnish Institute for Health and Welfare, while recommendations for workplaces are given by the Finnish Institute of Occupational Health. The guidance for workplaces recommends that the

employer should decide on the use of face masks after having conducted a risk assessment to decide if there are any situations in which masks should be used and what type of masks should be used in those situations.⁽²²⁾ This guidance is national-level guidance, but it is also acknowledged that regional recommendations and restrictions may vary and these must be taken into account when performing any risk assessment. Social and health care services also have their own recommendations and instructions on the use of face masks at a regional and or local level. These were considered outside the scope of this review as the focus was on national-level guidance.

France

As of 27 September 2022, wearing a face mask is mandatory for caregivers, patients and visitors in health or care settings (including hospitals, pharmacies or medical biology laboratories).⁽²³⁾ Wearing a face mask is recommended in hospitals (for older people) and in enclosed spaces and public transport (including metro, train, bus and plane). Face masks are also recommended in large gatherings (including outdoors, for people who are at higher risk because of their age or pathologies) and in the presence of older, immunocompromised or chronically ill or frail people (that is, older and or immunocompromised). Finally, face masks are also recommended for people with symptoms and for people up to seven days after becoming a close contact or when coming out of isolation.

Germany

From 1 October 2022 to 7 April 2023, FFP2 masks are mandatory on long-distance public transport.⁽⁶⁾ Children from 6 to 13 years of age as well as the staff on public transport are recommended to wear medical masks. To access hospitals, FFP2 masks and proof of testing are mandated. Patients and visitors to doctors' surgeries, dialysis facilities and other healthcare facilities must wear an FFP2 mask. Employers are required to conduct risk assessments of the workplace, and the wearing of face masks is mandatory wherever technical and organisational measures for infection protection are not feasible or are insufficient, especially if the 1.5 metre distance regulation cannot be observed.⁽³⁴⁾

Ireland

As of 28 February 2022, wearing a face mask is no longer mandatory in Ireland in any setting.^(1, 24) However, the guidance does provide recommendations for face mask use and the type of mask that should be used in certain circumstances. Specifically, the guidance recommends the use of a medical or respiratory mask (FFP2/FFP3/N95/KN95) by individuals at a higher risk of severe outcomes from

COVID-when in indoor or outdoor crowded places (see Appendix 1), when visiting someone at higher risk of severe outcomes from COVID-19, when visiting a healthcare setting, and on public transport. The Irish Government also recommends that individuals wear a medical mask or respirator if they stop self-isolation after seven days. In this instance individuals should wear a medical mask or respirator for 10 days in total.

In the home setting, it is recommended that if people test positive for SARS-COV-2 or have symptoms of COVID-19, both they and everyone in the room with them aged nine or older should wear a face mask.⁽²⁴⁾ The guidance states that for adults and older children this should be a medical mask or respirator. Children who are nine or older can wear a cloth mask that fits well if a medical mask or respirator does not fit well on their face.

Italy

Until 31 December 2022, the use of surgical face masks or higher-grade devices (that is, FFP2 or FFP3) is mandatory for those with symptoms of COVID-19.⁽⁹⁾ It is recommended that individuals wear a face mask if they are workers, users or visitors within health, social-health and social welfare facilities. This includes hospitals and long-term care facilities, nursing homes, hospices, rehabilitation facilities and residential facilities for older people. Children under six years of age and people with pathologies or disabilities incompatible with the use of a face mask, as well as people who must communicate with a person with disabilities, do not have to wear a face mask.

The Netherlands

In the Netherlands, wearing a face mask is not mandatory in any setting.⁽²⁵⁾ People at risk of becoming severely ill from COVID-19 (see Appendix 1) are advised to wear a face mask to protect their own health. In some cases, building managers can decide that individuals must wear a face mask in their building, even if face masks are not required there by law. The government has advised against the use of fabric masks and homemade masks. Instead, medical face masks are recommended.

Norway

From 12 February 2022, there has been no national requirement for the use of face masks.⁽²⁶⁾ However, face masks are recommended to reduce the risk of infection in people at increased risk of severe COVID-19 outcomes (see Appendix 1). It is advised that people with colds or respiratory tract symptoms wear a face mask if they are in close contact with people in at-risk groups (see Appendix 1). People in

at-risk groups and those who are unvaccinated are also advised to wear face masks during periods of widespread transmission if it is difficult to keep their distance from others.

There are a number of groups for whom the use of face masks is not recommended. These include children under 12 years of age and people who are unconscious or have a reduced state of consciousness, or for other reasons are unable to remove the face mask themselves.⁽²⁶⁾ Exemptions may apply to other individuals based on medical or other reasons. These include people with a chronic heart or lung disease, those with impaired hearing, and people who have an illness or condition that causes impaired cognitive function, or where the use of a face mask would be a major mental strain. Additionally, for people interacting with a person with hearing impairments face masks can be removed during the interaction. In this instance it is recommended that a one-metre distance is maintained.

The guidance does not state which type of mask is recommended but it does provide information on the types of face masks available (medical face masks, cloth face coverings, respiratory protection) and the correct use of face masks.

Portugal

Guidance published on 24 October 2022, states that face mask use is mandatory for people over the age of 10 years if they require access to healthcare facilities and services, or residential and or nursing homes.⁽¹²⁾ It is also recommended that people (particularly those who are at-risk, see Appendix 1) wear a face mask in places where it is not possible to distance themselves from others. The guidance does not provide information on the type of face mask people should use.

Spain

As of 20 April 2022, the Ministry of Health, Spain advised that face masks will no longer be mandatory indoors, with some exceptions.⁽¹⁵⁾ Face masks are mandatory in health facilities for visitors and people admitted when they are sharing common spaces outside their room. Masks are also mandatory for visitors to social health centres, specifically in shared areas and on public transport. The guidance for Spain also recommends that face masks should be used among vulnerable populations.

Sweden

As of 1 April 2022, the Public Health Agency of Sweden announced that COVID-19 was no longer classified as a generally hazardous and socially hazardous disease.⁽³⁰⁾ There is no current guidance in relation to face masks, but protecting the elderly and

vulnerable is encouraged. The agency's list of recommendations for reducing the spread of COVID-19 does not mention face masks.

Non EU/EEA

England

From 16 June 2022, there has been no mandatory requirement for the use of face masks in England.⁽²¹⁾ However, wearing a face mask is recommended when an individual is in close contact with someone at higher risk of becoming seriously ill from COVID-19 or other respiratory infections (see Appendix 1). The guidance also recommends that if a person has symptoms or a positive COVID-19 test result and they need to leave their private home, wearing a face mask can help reduce the spread of COVID-19. The guidance provides information on what makes a good face mask and states that scarves, bandanas or religious garments are likely to be less effective if they do not fit securely around the mouth and nose and are of a single layer. Face masks for children under the age of three are not recommended for safety reasons. In care home settings, visitors are encouraged to wear a face mask, particularly when moving through the care home.⁽³⁷⁾

Northern Ireland

In Northern Ireland, it is strongly recommended that face masks are used indoors in any premises that are accessible to the public.⁽²⁷⁾ This includes in shops, banks, entertainment and hospitality venues, indoor attractions and places of worship. It is also strongly recommended that individuals wear a face mask when visiting any health and social care setting (this includes hospitals, GP surgeries, dental practices, pharmacies and care homes), on all forms of passenger transport (airports, taxis, indoor areas of a ferry, train services, buses and coaches, including private hire vehicles and school services) and in indoor areas of public transport premises.

The guidance also strongly recommends that all pupils, regardless of age, wear a face mask on both public transport and school transport services (including education authority buses, Translink dedicated school buses, private coaches and taxis used to travel to school, public trains, buses and ferries) where it is appropriate for them to do so, and they are able to handle wearing a mask. Face masks should not be used by some children and young people with special educational needs who may become distressed.

It is also recommended that face masks are worn by both the student and the instructor during personal driving lessons unless both parties live in the same household. Face masks should also be worn by both the student and the examiner during a driving test. The type of face mask to be used is not specified in the

guidance except to say that the face mask should cover the mouth, nose and chin without any gaps at the side.

Scotland

In Scotland, it is strongly recommended that people aged 12 or over wear a face covering in indoor public places and on public transport.^(13, 14) It is recommended that face coverings are made of cloth or other textiles and should be two, preferably three, layers thick. The use of Fluid Resistant Surgical Masks (FRSM) is required by those attending appointments and visitors to healthcare settings including acute hospitals, community hospitals, primary care and wider community healthcare.

Wales

As of 1 July 2022, public health guidance for the general public in Wales strongly recommends that individuals wear a face mask in healthcare settings.⁽²⁸⁾ The guidance also recommends that if an individual is symptomatic and cannot stay at home, they should wear a face mask indoors with others to protect other people from catching SARS-CoV-2.

Australia

Australia published a National COVID-19 Community Protection Framework for a COVIDSafe Australia. As of 14 October 2022, this framework outlines three levels; Base level, Tier 1 and Tier 2. The framework outlines a suite of measures for responding to COVID-19 at each of these risk levels; states and territories may implement any or all of the measures at their discretion, relevant to their epidemiological context, and in accordance with their legislative frameworks for responding to COVID-19. Strategies in Tier 1 and Tier 2 may be implemented at different times across different settings.⁽¹⁸⁾ At the time of print, Queensland has published information stating they are moving from "Base level" to "Tier 1" of the framework. No information is available for other states or territories in Australia.⁽³⁵⁾

- Base level

At this level, close contacts are recommended to wear face masks indoors and on public transport. Individuals at higher risk of severe disease (see Appendix 1) should be aware of precautions such as face mask wearing to reduce their risk of exposure. In the business sector, face mask wearing is recommended for recovered cases and close contacts. In high-risk settings (including aged care, disability care and hospital care settings), face masks should be worn as per workforce guidance for close contacts. Workforce guidance differs across regions in Australia. This was considered outside the scope of this review as the focus was on national-level level guidance.

Visitors to these settings are not required to wear face masks. However, facilities will assess their own risk and may require visitor face mask wearing at all times.

- Tier 1

At Tier 1 of the framework face masks are recommended on public transport, in high-risk settings and indoors. Individuals at higher risk (see Appendix 1) should wear surgical face masks or respirators in public settings. In the business sector, face mask wearing is recommended for staff. In high-risk settings, face mask wearing is recommended for visitors to aged care and disability residential care settings only.

- Tier 2

At Tier 2, face masks are recommended in a range of public settings and for visitors to aged care and disability residential care settings.

Israel

In Israel, guidance published on 15 June 2022 states that face masks must be worn in community healthcare settings; visitors must wear a face mask in any closed area where a resident is staying, and it is recommended they wear a face mask in all other parts of the facility.^(7, 8) The type of face mask is not specified, but the guidance does highlight the importance of face mask fit.

New Zealand

As of 4 October 2022, all visitors to healthcare settings (for example, primary and community care, hospitals, residential care and other allied health services) must wear a face mask.⁽¹¹⁾ Visitors include those accompanying patients or those attending the premises for reasons other than being a patient or a healthcare worker. The face mask requirement does not apply to people visiting psychotherapy, counselling or mental health and addiction service premises, and residents of residential care. Requirements for patients are set for each facility based on national infection prevention and control guidance. The guidance states that face masks will typically not be required if the patient is an inpatient, in residential care, or is under the age of 12.

Wearing a face mask is strongly recommended in crowded places, public transport (buses, commuter trains, indoors on ferries, flights), enclosed spaces with poor ventilation, close contact settings such as face-to-face conversations, or when visiting people at high risk (see Appendix 1). Wearing a face mask is also strongly recommended for:

- individuals who are a household contact of somebody with a confirmed COVID-19 diagnosis whenever they leave their private home during the five days they are testing
- those who are at higher risk of getting seriously ill from COVID-19
- those who are keen to reduce their risk of becoming sick.

Some workplaces, organised special events, or maraes (a communal and sacred meeting in Māori culture) may ask people to wear a mask as a condition of entry. This will be at their discretion and is no longer a Government requirement.

The guidance does not specify what type of face mask people should wear, but it does offer information on the different types of masks and advises that the key things to consider when choosing a face mask are:

- the individual's risk of infection in a particular situation
- how well the mask fits
- the filtration ability of the material
- the comfort of the face mask.

Face masks are noted to be unsuitable for some people due to disabilities or health conditions.⁽¹⁰⁾ The guidance states that if an individual cannot wear a face mask they can apply for a Mask Exemption Pass, but this is not compulsory.

Singapore

As of 10 October 2022, the Ministry of Health, Singapore advises that face mask wearing is required in healthcare facilities (hospitals and national specialty centres). Face mask wearing is required in all indoor premises of these facilities (including at retail or food and beverage establishments located within the building).^(16, 17) Face mask wearing is also required in residential care homes (including welfare and sheltered homes for the aged, as well as adult disability homes) and ambulances and public transport. For employees (and contractors and vendors) who are physically onsite in these settings, face mask-wearing is required indoors except when (i) not interacting in person with another individual present in that area and (ii) not in customer-facing areas where interaction is likely to happen. The Ministry of Health also encourages individuals to wear face masks when in crowded places or when in contact with vulnerable persons (see Appendix 1).

3.2. Guidance to be implemented to limit the impact of COVID-19 surges

Planned changes to guidance on the use of face masks that may be implemented in the event of COVID-19 surges were identified for Australia,⁽¹⁸⁾ Austria,⁽⁵⁾ Denmark,⁽²⁰⁾ England,⁽²¹⁾ Finland,⁽³⁶⁾ Germany,⁽⁶⁾ Ireland,⁽³⁷⁾ Norway⁽²⁶⁾ and Scotland⁽²⁹⁾ (see Table 2).

Guidance for both Austria⁽⁵⁾ and Norway⁽²⁶⁾ states that mandatory requirements and or recommendations may be introduced based on the infection situation. Guidance for Austria notes the possibility of the reintroduction of the FFP2 mask requirement in various settings, but no further details were identified.⁽⁵⁾ Guidance for Ireland notes that if required, the introduction of mask mandates in certain settings (for example transport and healthcare) will involve a point-in-time assessment of a constellation of indicators with due consideration of the personal, ethical and public health perspectives.⁽³⁷⁾ Guidelines for England⁽²¹⁾ states that wearing a face mask will be recommended when COVID-19 rates are high and an individual is in close contact with other people, such as in crowded spaces, enclosed spaces with poor ventilation, or when there are a lot of respiratory viruses circulating, for example, in winter. In Finland⁽³⁶⁾ and Denmark⁽²⁰⁾ similar recommendations were identified that include the possibility of reintroducing face mask wearing, if necessary. However, specific measures or strategies that may be implemented to limit the impact of a COVID-19 surge are not described and it is not specified if the guidance will be mandatory or recommended.

Based on the epidemiological context, under frameworks for COVID-19 prevention published in Australia,⁽¹⁸⁾ Germany,⁽⁶⁾ and Scotland⁽²⁹⁾ face mask wearing will be introduced in various settings, if necessary. Under the framework published in Germany,⁽⁶⁾ face masks may be required on public transport and in publicly accessible indoor spaces (although exceptions can be made based on COVID-19 diagnosis or vaccination) at "Stage 1" of the framework. Additionally, at this stage, face masks will be required in schools and other training facilities for employees and pupils aged 11 years or older. In Australia⁽¹⁸⁾, at "Base Level" individuals at higher risk of severe outcomes should be aware of precautions such as mask-wearing to reduce their risk of exposure. In the business sector, mask-wearing is recommended for recovered cases and close contacts. In high-risk settings (including aged care, disability care and hospital care settings), masks should be worn as per workforce guidance for close contacts. Visitors to these settings are not required to wear masks. However, facilities will assess their own risk and may require visitor mask-wearing at all times.

In Germany,⁽⁶⁾ if a concrete threat to the functioning of the health system is identified, further measures may be ordered. This includes mandatory face mask-wearing (FFP2 mask or medical mask) at outdoor events if a minimum distance of 1.5 metres cannot be maintained. Similar requirements will be introduced in Scotland⁽²⁹⁾ when a "Medium Threat" is in place, and in Australia⁽¹⁸⁾ at "Tier 1" where individuals at higher risk should wear surgical masks or respirators (P2/N95) in public settings. The guidance for Australia⁽¹⁸⁾ states that, at "Tier 1", face mask wearing is recommended for staff in the business sector. In high-risk settings, face mask-wearing is recommended for visitors to aged care and disability residential care settings only. In Scotland,⁽²⁹⁾ the use of face masks is not mentioned in the suite of measures for the "High Threat" response category. In Australia,⁽¹⁸⁾ at "Tier 2", face masks are recommended in a range of public settings and for visitors to aged care and disability residential care settings.

Table 2: Summary of international guidance on the use of face masks (correct as of 30 November 2022)

| Organisations | | |
|--|---|----------------------------|
| Country and or organisation | Current guidance | Surge plan guidance |
| <p>Organisation: ECDC (European Centre for Disease Prevention and Control)</p> <p>Title: Considerations for the use of face masks in the community in the context of the SARS-CoV-2 Omicron variant of concern⁽²⁾</p> <p>Date published/updated: 7 February 2022</p> | <p>Mandatory None identified.</p> | |
| | <p>Recommendation</p> <ul style="list-style-type: none"> ▪ A public health policy for wearing a face mask in public spaces should be considered in areas with community transmission when the public health objective is to limit community transmission. An additional option is to focus on the use of face masks in specific settings to protect people vulnerable to severe COVID-19, such as older people and people with underlying medical conditions. ▪ Wearing a face mask should be considered in crowded outdoor settings where physical distancing is not possible when the public health objective is to limit community transmission. ▪ People vulnerable to severe COVID-19, such as older people or those with underlying medical conditions, high-risk contacts of COVID-19 cases who cannot stay in quarantine for the full recommended quarantine period, as well as COVID-19 cases who cannot isolate for the full recommended isolation period should consider wearing a respirator if available and tolerated. ▪ In households, the use of a medical face mask or a respirator should be considered for people with symptoms of COVID-19 or confirmed COVID-19 and for the people who share their household, especially when isolation of the person with symptoms of or confirmed COVID-19 is not possible. | |
| Country and or organisation | Current guidance | Surge plan guidance |
| <p>Organisation: WHO (World Health Organization)</p> | <p>Mandatory None identified.</p> | None identified. |
| | <p>Recommendation</p> | |

| | | |
|---|--|--|
| <p>Title: Infection prevention and control in the context of coronavirus disease (COVID-19): A living guideline⁽³⁾</p> <p>Date published/updated: 7 March 2022</p> | <ul style="list-style-type: none"> ■ In settings where there is community or cluster transmission of SARS-CoV-2, irrespective of vaccination status or history of prior infection, when interacting with individuals who are not members of the household face masks are recommended: <ul style="list-style-type: none"> ○ in indoor settings where ventilation is known to be poor or cannot be assessed, or the ventilation system is not properly maintained, regardless of whether physical distancing of at least 1-metre can be maintained ○ in indoor settings that have adequate ventilation if physical distancing of at least 1-metre cannot be maintained ○ in outdoor settings where physical distancing of at least 1-metre cannot be maintained. ■ In settings where there is community or cluster transmission of SARS-CoV-2, policies should be developed, strengthened and implemented to encourage appropriate adherence to a comprehensive package of preventive measures to reduce transmission including face mask adherence by the general public. ■ Individuals with a higher risk of severe complications from COVID-19 should wear a medical mask where physical distancing of at least 1-metre cannot be maintained. ■ In any transmission scenario, persons with any symptoms suggestive of COVID-19 should wear a medical mask. ■ Asymptomatic persons who test positive for SARS-CoV-2 should wear a medical mask when with others for a period of 10 days after testing positive. ■ Persons with suspected COVID-19 or mild COVID-19 symptoms should wear a medical mask as much as possible, especially when there is no alternative to being in the same room with other people. | |
|---|--|--|

| | | |
|---|---|----------------------------|
| | <ul style="list-style-type: none"> ■ Caregivers of, or those sharing a living space with, people with suspected COVID-19 or with mild COVID-19 symptoms should wear a medical mask when in the same room as the affected person. ■ Masks are not required for children 5 years of age and under. In areas where there is known or suspected community transmission of SARS-CoV-2, masks are recommended for use in children aged 6 to 11 years in the following settings: <ul style="list-style-type: none"> ○ in indoor settings where ventilation is known to be poor or cannot be assessed, or the ventilation system is not properly maintained, regardless of whether physical distancing of at least 1-metre can be maintained ○ in indoor settings that have adequate ventilation (at least 10 litres/second/person) if physical distancing of at least 1-metre cannot be maintained. ■ Adolescents 12 years or older should follow the same WHO recommendations for mask use as adults. ■ Children with cognitive or respiratory impairments, developmental disorders, disabilities (as defined by the Convention on the Rights of Persons with Disabilities) or other specific health conditions who experience difficulties wearing a mask or have health conditions that interfere with mask-wearing should not be required to wear a mask. | |
| <p>Country and or organisation</p> | <p>Current guidance</p> | <p>Surge plan guidance</p> |
| <p>Organisation: US CDC (Centers for Disease Control and Prevention) Title: Use and care of masks⁽⁴⁾ Date published/updated: 9 September 2022</p> | <p>Mandatory None identified.</p> <p>Recommendation</p> <ul style="list-style-type: none"> ■ face masks should be considered in the following settings: <ul style="list-style-type: none"> ○ in positive cases if they must be around others at home or in public ○ in indoor public transportation settings | <p>None identified.</p> |

| | | |
|--|--|-------------------------|
| | <ul style="list-style-type: none"> ○ if an individual is at medium or high risk of getting very sick in which case they should wear a high-quality mask or respirator ○ when indoors with someone at high risk of getting very sick ○ by people at increased risk, and the people around them, when the COVID-19 Community Level is medium or high. <ul style="list-style-type: none"> ▪ children ages 2 years and older can wear face masks or respirators to protect themselves and others from COVID-19 ▪ people with certain disabilities or their caregivers can assess whether they need to wear a face mask ▪ people who are deaf or hard of hearing may consider wearing a clear face mask or a cloth face mask with a clear panel. | |
| Country and or organisation | | |
| Austria | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Federal Ministry of Social Affairs, Health, Care and Consumer Protection</p> <p>Title: Current measures⁽⁵⁾</p> <p>Date published/updated: 1 August 2022</p> | <p>Mandatory FFP2 masks are mandatory, regardless of COVID-19 status, in the following enclosed settings:</p> <ul style="list-style-type: none"> ▪ hospitals and health facilities ▪ old people's homes and nursing homes ▪ places where health and care services are provided. <p>Recommendation For individuals who test positive for SARS-CoV-2, there is an obligation to wear an FFP2 mask at all times when:</p> <ul style="list-style-type: none"> ▪ outside the private living area <ul style="list-style-type: none"> ○ indoors, if contact with other people is not excluded ○ outdoors, if a minimum distance of 2 meters from other people cannot be maintained. ▪ on public transport | <p>None identified.</p> |

| | | |
|---|--|---|
| | <ul style="list-style-type: none"> ▪ on private transport, if contact with other persons is not excluded ▪ in the private living area at meetings of people from different households <ul style="list-style-type: none"> ○ indoors ○ outdoors, if a minimum distance of 2 meters from other people cannot be maintained. | |
| Country and or organisation | | |
| Belgium | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Belgian Federal Government</p> <p>Title: Consultative committee: face mask requirement and travel restrictions lifted as of 23 May 2022⁽¹⁹⁾</p> <p>Date published/updated: 23 May 2022</p> | <p>Mandatory Face masks are required in:</p> <ul style="list-style-type: none"> ▪ in hospitals, surgeries (at the doctor’s office) and pharmacies. <p>Recommendation Face masks are recommended in the following settings:</p> <ul style="list-style-type: none"> ▪ crowded spaces ▪ healthcare environments such as residential care centres, dental practices, physiotherapist, psychologist or speech therapist. | None identified. |
| Country and or organisation | | |
| Czechia | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Ministry of Health</p> <p>Title: Cancellation of several emergency measures, with effect from 1 May 2022⁽³¹⁾</p> <p>Date published/updated: 29 April 2022</p> | <p>Mandatory None identified.</p> <p>Recommendation None identified.</p> | None identified. |
| Country and or organisation | | |
| Denmark | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Danish Health Authority</p> <p>Title: Face masks⁽²⁰⁾</p> | <p>Mandatory None identified.</p> <p>Recommendation Face masks are recommended if an individual:</p> | Possibility of reintroducing contact reducing measures, including face mask wearing, and stricter protocols if necessary. ⁽³³⁾ |

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| <p>Date published/updated: 5 November 2022</p> <p>Organisation: Danish Health Authority</p> <p>Title: Speed, efficiency and trust - Strategy for handling COVID-19 until the spring of 2023⁽³³⁾</p> <p>Date published/updated: June 2022</p> | <ul style="list-style-type: none"> ▪ has tested positive for COVID-19 or has significant symptoms and has to move outside their home, e.g. if they need treatment ▪ needs to be tested for COVID-19 ▪ has respiratory symptoms and are in the waiting room at general practice, the emergency doctor or the ear/nose/throat specialist practice. ▪ feels more comfortable wearing a face mask or face shield.⁽²⁰⁾ | |
| Country and or organisation | | |
| Finland | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Finnish Institute for Health and Welfare</p> <p>Title: Transmission and protection⁽²²⁾</p> <p>Date published/updated: 30 September 2022</p> <p>Organisation: Finnish Institute for Health and Welfare</p> <p>Title: The late autumn respiratory tract infection season is about to begin – how to protect yourself from Covid-19 and other infections⁽³⁶⁾</p> <p>Date published/updated: 21 October 2022</p> | <p>Mandatory None identified.</p> <p>Recommendation Face masks are recommended in the following settings:</p> <ul style="list-style-type: none"> ▪ indoor public spaces and on public transport if: <ul style="list-style-type: none"> ○ an individual is seeking treatment or a test because of suspected infection with COVID-19 ○ an individual has symptoms of a respiratory infection, but needs to leave their home ○ an individual has been exposed to a positive COVID-19 case. ▪ those aged 15 years or older and unvaccinated, or those who are at higher risk of infection should consider wearing an effective face mask ▪ in the workplace, the use of masks is decided by the employer who performs a risk assessment ▪ social and health care services also have their own recommendations and instructions on the use of face at a regional or local level ▪ Regions, actors and organisations can have local recommendations for using masks.⁽²²⁾ | <p>With respiratory tract infection season commencing, it is recommended for an individual to assess their own risk and use a face mask if necessary.⁽³⁶⁾</p> |
| Country and or organisation | | |

| France | | |
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| | Current guidance | Surge plan guidance |
| <p>Organisation: Government of France</p> <p>Title: Coronavirus information⁽²³⁾</p> <p>Date published/updated: 27 September 2022</p> | <p>Mandatory Wearing a mask remains mandatory for caregivers, patients and visitors in health or care settings (including hospitals, pharmacies, or medical biology laboratories).</p> <p>Recommendation Face masks are recommended in the following settings:</p> <ul style="list-style-type: none"> ▪ in enclosed places and public transport during peak hours (metro, train, bus, plane) ▪ in large gatherings, including outdoors, for people who are vulnerable because of their age or pathologies ▪ in the presence of older people, immunocompromised or chronically ill people ▪ for frail people (older or immunocompromised) ▪ in hospitals for older people ▪ in the case of symptoms and up to 7 days in case of at-risk contact status or coming out of isolation. | None identified. |
| Country and or organisation | | |
| Germany | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Federal Government</p> <p>Title: Corona protective measures – which has been in place since October⁽⁶⁾</p> <p>Date published/updated: 1 October 2022</p> <p>Organisation: Federal Ministry of Labor and Social Affairs</p> <p>Title: SARS-CoV-2 Occupational Health and Safety Ordinance (<i>Corona-ArbSchV</i>)⁽³⁴⁾</p> | <p>Mandatory FFP2 masks are mandatory in the following settings:</p> <ul style="list-style-type: none"> ▪ long-distance public transport ▪ for access to hospitals and care facilities. Proof of testing is also required by patients and visitors to doctors' surgeries, dialysis facilities and other healthcare facilities. <p>Employers are required to conduct risk assessments and the wearing of face masks is mandatory wherever technical and organisational measures for infection protection are not feasible or are insufficient, especially if the 1.5 meter distance regulation cannot be observed. Following a risk assessment, a medical face</p> | <p>Current guidance has been implemented and is planned to remain in place until 7 April 2023. However, in the event of a surge in transmission, the measures detailed under Stage 1 and Stage 2 will be implemented.</p> <p>Stage 1: Possible further measures Face masks may be required in the following settings:</p> <ul style="list-style-type: none"> ▪ on public transport ▪ in publicly accessible indoor spaces. This also applies to culture, sports, leisure and gastronomy. Excluding anyone who has a test certificate or who can prove that they have recently been vaccinated or recovered |

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| <p>Date published/updated: 28 September 2022</p> | <p>mask may be required for mutual protection. If the risk assessment shows that the protection provided by a medical face mask is not sufficient and a mask with the function of self-protection is necessary, an FFP2 mask must be provided.</p> | <ul style="list-style-type: none"> ▪ in schools and other training facilities for employees and pupils from the 5th school year (insofar as this is necessary to maintain regular classroom teaching). <p>Stage 2: Further measures in the event of a concrete threat to the health situation: mandatory mask (FFP2 mask or medical mask) at outdoor events if a minimum distance of 1.5 meters cannot be maintained.</p> |
| <p>Country and or organisation</p> | | |
| <p>Ireland</p> | | |
| <p>Organisation: HSE Title: Face masks: when and how to wear one⁽¹⁾ Date updated: 27 February 2022</p> <p>Organisation: Department of the Taoiseach Title: COVID-19: Reframing the Challenge, Continuing our Recovery and Reconnecting⁽²⁴⁾ Date published/updated: 22 February 2022</p> <p>Organisation: Department of Health Title: Strategic approach for the management of COVID-19. Preparedness for Autumn/Winter 2022/2023⁽³⁷⁾ Date published/updated: 12 October 2022</p> | <p>Current guidance</p> <p>Mandatory None identified.</p> <p>Recommendation Medical or respiratory face masks are recommended in the following settings:</p> <ul style="list-style-type: none"> ▪ if an individual at higher risk from COVID-19 is in indoor or outdoor crowded places ▪ visiting a healthcare setting ▪ visiting someone at higher risk of COVID-19 ▪ stopping self-isolation after 7 days - medical masks or respirators are recommended for 10 days in total ▪ at home for individuals that test positive for COVID-19 or display symptoms who are self-isolating but encounter others at home (this includes all individuals older than 9 years)⁽¹⁾ ▪ on public transport.⁽²⁴⁾ <p>For those aged 9 or older, a cloth mask that fits correctly is sufficient if a medical or respirator face mask does not fit properly.⁽¹⁾</p> | <p>Surge plan guidance</p> <p>If required, the introduction of mask mandates in certain settings (e.g. transport and healthcare) will involve a point-in-time assessment of a constellation of indicators with due consideration of the personal, ethical and public health perspectives. Any such mandate will be pursued in a proportionate manner, will be the least intrusive measure to achieve the identified legitimate public health goal(s) and will be of limited duration.⁽³⁷⁾</p> |
| <p>Country and or organisation</p> | | |
| <p>Italy</p> | | |

| | Current guidance | Surge plan guidance |
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| <p>Organisation: Ministry of Health Title: How to protect yourself from Covid-19⁽⁹⁾ Date published/updated: 31 October 2022</p> | <p>Mandatory The following provisions remain in force:</p> <ul style="list-style-type: none"> in the event that symptoms appear, the use of surgical masks or higher devices (FFP2/FFP3) is necessary. | <p>Current guidance has been implemented and is planned to remain in place until 31 December 2022.</p> |
| | <p>Recommendation The following provisions remain in force:</p> <ul style="list-style-type: none"> workers, users and visitors to health, social-health and social-welfare facilities (including hospitality and long-term care facilities, nursing homes, hospices, rehabilitation facilities and residential facilities for older people) have an obligation to wear respiratory protective equipment. <p>The following are not obliged to wear respiratory protective equipment:</p> <ul style="list-style-type: none"> children under the age of 6 people with pathologies or disabilities incompatible with the use of the mask, as well as people who must communicate with a person with disabilities so that they cannot make use of the device. | |
| <p>Country and or organisation</p> <p>The Netherlands</p> | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Government of the Netherlands Title: When do I need to wear a face mask? ⁽²⁵⁾ Date published/updated: unavailable</p> | <p>Mandatory None identified.</p> | <p>None identified.</p> |
| | <p>Recommendation Face masks are recommended in the following settings and for certain populations:</p> <ul style="list-style-type: none"> for older people for people at risk of becoming severely ill if they get COVID-19 | |

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| | <ul style="list-style-type: none"> building managers can decide that individuals must wear a face mask in their building, even if face masks are not required there by law.⁽²⁵⁾ | |
| Country and or organisation | | |
| Norway | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Norwegian Institute of Public Health Title: Face mask and visor use by the general public⁽²⁶⁾ Date published/updated: 14 February 2022</p> | <p>Mandatory None identified.</p> <p>Recommendation Face masks are recommended in the following settings:</p> <ul style="list-style-type: none"> for people with colds or respiratory tract symptoms in close contact with people in at-risk groups for people in at-risk groups and unvaccinated people during periods of widespread transmission if it is difficult to keep their distance from others. | <p>With a high disease burden in society and where it is difficult to keep a safe distance, face mask use can be a measure to reduce the risk of transmission. Face masks cannot replace other infection control measures, but come in addition to them. Both local and national advice and orders can be introduced, based on the current infection situation.</p> |
| Country and or organisation | | |
| Portugal | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Ministry of Health Title: COVID-19⁽¹²⁾ Date published/updated: 24 October 2022</p> | <p>Mandatory Face masks are mandatory in the following settings:</p> <ul style="list-style-type: none"> for people over the age of 10 years to access: <ul style="list-style-type: none"> health facilities and services residential homes for older people. <p>Recommendation Face masks are recommended in the following settings:</p> <ul style="list-style-type: none"> in places of high concentration where it is not possible to distance, particularly to the most vulnerable. | <p>None identified.</p> |
| Country and or organisation | | |
| Spain | | |
| | Current guidance | Surge plan guidance |

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| <p>Organisation: Ministry of Health Title: Masks will no longer be mandatory indoors from April 20⁽¹⁵⁾ Date published/updated: 06 April 2022</p> | <p>Mandatory Face masks are mandatory in the following settings:</p> <ul style="list-style-type: none"> ▪ in health facilities for visitors and people admitted when they are sharing common spaces outside their room ▪ in social health centres for visitors in shared areas ▪ on public transport. | <p>None identified.</p> |
| <p>Country and or organisation</p> | | |
| <p>Sweden</p> | | |
| <p>Organisation: Swedish Public Health Agency Title: Corona pandemic: This applies right now⁽³⁰⁾ Date published/updated: 01 October 2022</p> | <p>Current guidance</p> <p>Mandatory None identified.</p> <p>Recommendation No COVID-19 public health measures or strategies are in place in relation to face masks, but protecting the elderly and vulnerable is encouraged.</p> | <p>Surge plan guidance</p> <p>None identified.</p> |
| <p>Non EU/EEA</p> | | |
| <p>Country and or organisation</p> | | |
| <p>England</p> | | |
| <p>Organisation: UK Health Security Agency Title: Living safely with respiratory infections, including COVID-19⁽²¹⁾ Date published/updated: 16 June 2022</p> <p>Organisation: Department of Health and Social Care Title: Infection prevention and control in adult social care: COVID-19 supplement⁽³⁸⁾</p> | <p>Current guidance</p> <p>Mandatory None identified.</p> <p>Recommendation Face masks are recommended:</p> <ul style="list-style-type: none"> ▪ when an individual comes into close contact with someone at higher risk of becoming seriously unwell from COVID-19 or other respiratory infections. <p>Visitors to care homes should be encouraged to wear a face mask, particularly when moving through the home. Removal of the mask in non-communal areas may also be considered following a risk assessment if it causes distress</p> | <p>Surge plan guidance</p> <p>Face masks may be recommended in the following settings:</p> <ul style="list-style-type: none"> ▪ when COVID-19 rates are high and an individual will be in close contact with other people, such as in crowded and enclosed spaces ▪ when there are a lot of respiratory viruses circulating, such as in winter, and an individual will be in close contact with other people in crowded and enclosed spaces. |

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| <p>Date published/updated: 11 October 2022</p> | <p>to the resident, is hindering communication, or in the case that the visitor is eating or drinking.</p> <p>Face coverings for children under the age of 3 are not recommended for safety reasons.</p> | |
| <p>Country and or organisation</p> | | |
| <p>Northern Ireland</p> | | |
| <p>Organisation: NI Direct Government Services Title: Coronavirus (COVID-19): face coverings guidance⁽²⁷⁾ Date published/updated: unavailable</p> | <p>Current guidance</p> <p>Mandatory None identified.</p> <p>Recommendation Face masks are strongly recommended in the following settings:</p> <ul style="list-style-type: none"> ▪ indoors in any premises that are accessible to the public. This includes shops, banks, entertainment and hospitality venues, indoor attractions and places of worship ▪ when visiting any Health and Social Care setting ▪ on all forms of passenger transport and in stations, including: <ul style="list-style-type: none"> ○ on all buses and coaches, including private hire vehicles and school services ○ on all train services ○ in indoor areas of a ferry ○ in taxis ○ in airports ○ in indoor areas of public transport premises. ▪ for all pupils, regardless of age, on both public transport and school transport services, where it is appropriate for them to do so and they are able to handle wearing a mask as directed ▪ during personal driving lessons. | <p>Surge plan guidance None identified.</p> |
| <p>Country and or organisation</p> | | |
| <p>Scotland</p> | | |
| | <p>Current guidance</p> <p>Mandatory</p> | <p>Surge plan guidance</p> |

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| <p>Organisation: Scottish Government Title: Coronavirus (COVID-19): staying safe and protecting others⁽¹³⁾ Date published/updated: 24 August 2021</p> <p>Organisation: Scottish Government Title: Coronavirus (COVID-19): extended use of face masks and face coverings in hospitals, primary care and wider community healthcare⁽¹⁴⁾ Date published/updated: 9 November 2020</p> <p>Organisation: Scottish Government Title: Coronavirus (COVID-19): Scotland's Strategic Framework update - February 2022⁽²⁹⁾ Date published/updated: 22 February 2022</p> | <p>The continuation of the extended use of Fluid Resistant (Type IIR) Surgical Masks (FRSM) by patients and visitors is mandatory in the following settings:</p> <ul style="list-style-type: none"> ▪ primary care (GP practices, dentists, opticians and pharmacies) ▪ wider community healthcare (includes hospice settings and prison and detention settings) ▪ acute hospitals (mental health, maternity, neonatal and paediatrics) <p>community hospitals.⁽¹⁴⁾</p> <p>Recommendation Face masks are strongly recommended for those aged 12 years and older in indoor public places and on public transport.⁽¹³⁾ People should follow venue guidance on face masks when required.</p> | <p>Medium threat: face masks required in indoor public places and on public transport.⁽²⁹⁾ Low threat: behaviours and settings adapted to reduce spread (for example, appropriate guidance on face coverings).</p> |
| Country and or organisation | | |
| Wales | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Welsh Government Title: Public health guidance for the general public⁽²⁸⁾ Date published/updated: 1 July 2022</p> | <p>Mandatory None identified.</p> <p>Recommendation Face masks are recommended in the following settings:</p> <ul style="list-style-type: none"> ▪ in healthcare settings ▪ indoors for individuals who are symptomatic and cannot stay at home. | <p>None identified.</p> |

| Country and or organisation | | |
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| Australia | | |
| Country and or organisation | Current guidance | Surge plan guidance |
| <p>Organisation: Australian Government</p> <p>Title: National COVID-19 Community Protection Framework for a COVDSafe Australia⁽¹⁸⁾</p> <p>Date published/updated: 24 November 2022</p> | <p>Mandatory None identified.</p> <p>Recommendation Base level:</p> <ul style="list-style-type: none"> ▪ close contacts are recommended to wear masks indoors and on public transport ▪ individuals at higher risk (those over 70 years old, COVID-19 at-risk medical conditions or immunocompromised) should be aware of precautions such as face mask wearing to reduce risk of exposure ▪ face mask wearing is recommended for recovered cases and close contacts in the business sector ▪ face mask wearing as per workforce guidance for close contacts in high risk and hospital settings (this includes aged care and disability care (residential and home). Visitors not required to wear masks. However, facilities will assess their own risk and may require visitor face mask wearing at all times. <p>Tier 1:</p> <ul style="list-style-type: none"> ▪ face masks on public transport and in high-risk settings and indoor mask wearing ▪ surgical masks or respirators (P2/N95) in public settings for individuals at higher risk (those over 70 years old, COVID-19 at-risk medical conditions or immunocompromised) ▪ face mask wearing for staff in the business sector ▪ face mask wearing for visitors to aged care and disability residential care settings. <p>Tier 2:</p> <ul style="list-style-type: none"> ▪ face mask wearing in a range of public settings ▪ face mask wearing for visitors to aged care and disability residential care settings. | <p>See 'current guidance'.</p> |
| Country and or organisation | | |

| Israel | | |
|---|--|---------------------|
| | Current guidance | Surge plan guidance |
| <p>Organisation: Ministry of Health Title: Make a Change - Wear a Mask Please⁽⁷⁾ Date published/updated: 15 June 2022</p> <p>Organisation: Ministry of Health Title: Updating the guidelines of the corona virus epidemic - an increase in the spread of a variant BA5⁽⁸⁾ Date published/updated: unavailable</p> | <p>Mandatory Face masks must be worn in community healthcare settings by staff and visitors in any closed area where a resident is staying, and face mask wearing is recommended in all other parts of the facility.⁽⁸⁾</p> | None identified. |
| | <p>Recommendation Face masks are recommended in indoor settings.⁽⁷⁾</p> | |
| Country and or organisation | | |
| New Zealand | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Ministry of Health Title: Wearing a face mask⁽¹⁰⁾ Date published/updated: 10 November 2022</p> <p>Organisation: Ministry of Health Title: COVID-19: Use of face masks in the community⁽¹¹⁾ Date published/updated: 4 October 2022</p> | <p>Mandatory Face masks must be worn at most healthcare services.⁽¹⁰⁾ For patients and workers at healthcare services, face mask requirements will be decided locally.</p> | None identified. |
| | <p>Recommendation Face masks are recommended in the following settings:</p> <ul style="list-style-type: none"> ▪ in crowded places ▪ on public transport including buses, commuter trains, indoors on ferries and flights ▪ when visiting people at high risk ▪ in enclosed spaces with poor ventilation ▪ in close contact settings, such as face-to-face conversations ▪ if an individual is a household contact and testing daily for 5 days ▪ if an individual is at higher risk of getting seriously ill from COVID-19 ▪ to reduce an individual's risk of becoming sick.⁽¹⁰⁾ | |

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| | <p>Some workplaces and organised special events may ask people to wear a mask as a condition of entry. This will be at their discretion and no longer a Government requirement. ⁽¹¹⁾</p> <p>You do not need to wear a face mask if:</p> <ul style="list-style-type: none"> ▪ you live at a residential care service ▪ you visit psychotherapy, counselling, or mental health and addiction services. | |
| Country and or organisation | | |
| Singapore | | |
| | Current guidance | Surge plan guidance |
| <p>Organisation: Ministry of Health Title: Transition Phase to COVID-19 Resilience⁽¹⁶⁾ Date published/updated: 10 October 2022</p> <p>Organisation: Ministry of Health Title: Requirements for Safe Management Measures at the workplace⁽¹⁷⁾ Date published/updated: 29 August 2022</p> | <p>Mandatory Face masks are required in the following settings:</p> <ul style="list-style-type: none"> ▪ healthcare facilities ▪ residential care homes (including welfare and sheltered homes for older people, as well as adult disability homes) ▪ ambulances ▪ public transport ▪ in all indoor premises of healthcare facilities including at retail or food and beverage establishments located within the building.⁽¹⁶⁾ <p>For employees (and contractors and vendors) who are physically onsite at the workplace in healthcare facilities, mask wearing is required indoors except:</p> <ul style="list-style-type: none"> ▪ when not interacting in person with another individual present in that area ▪ when not in customer-facing areas where interaction is likely to happen.⁽¹⁷⁾ <p>Recommendation Individuals are encouraged to wear face masks when in crowded places, or when visiting or interacting with vulnerable persons.⁽¹⁶⁾</p> | <p>None identified.</p> |

4 Conclusion

Since the onset of the COVID-19 pandemic, the use of face masks in public places has been recommended by many countries to limit the transmission of SARS-CoV-2 infection, with several jurisdictions introducing mandatory mask-wearing in various settings at the peak of the pandemic. This review presents a synthesis of current and planned public health guidance (from three organisations and 22 countries) on the use of face masks to mitigate the spread of SARS-CoV-2 infection.

The three organisations (ECDC, WHO, US CDC,) offer recommendations (not mandated) on the use of face masks in certain settings where the public health objective is to address community transmission of COVID-19. In the review of included countries, almost all countries have guidance in place for the use of face masks in certain settings. Exceptions were Czechia (which lifted all COVID restrictions, including recommendations for face masks from 1 May 2022) and Sweden (which no longer provides recommendations for face masks but encourages the protection of vulnerable individuals). The guidance published by countries on face mask wearing to mitigate the spread of SARS-CoV-2 infection can be broadly categorised into guidance outlining where face mask use is a mandatory requirement and or guidance which provides recommendations on face mask use. Where mandatory requirements were identified, typically little detail was provided on the legislative basis for the same or how the requirements would be enforced.

Mandatory requirements identified in the review focus on requirements for face masks on public transport, in various healthcare settings and for people who are test positive or are showing symptoms of COVID-19. In some instances, the guidance also mandates the type of mask that should be used, including requirements for FFP2 or FRSM masks. For other countries, the use of face masks in these situations is recommended but is not required. Across the included countries, other situations in which face masks are recommended include that members of the general public should wear a face mask in crowded spaces, in enclosed spaces with poor ventilation, if they are a close contact of somebody with COVID-19, if they are at risk of severe COVID-19 outcomes, and if they are in the company of those at higher risk of severe COVID-19 outcomes. Guidance documents typically specified that their guidance pertained to individuals aged 12 years and older, with some documents identifying groups of individuals (including, for example, younger children) to which exceptions do not apply or who are exempt from mandatory requirements.

Planned changes to public health guidance on the use of face masks to be implemented in the event of COVID-19 surges were identified for nine countries

(Austria⁽⁵⁾, Denmark⁽³³⁾, England,⁽²¹⁾ Finland,⁽³⁶⁾ Germany,⁽⁶⁾ Ireland,⁽³⁷⁾ Norway,⁽²⁶⁾ Scotland⁽²⁹⁾ and Australia⁽¹⁸⁾). Guidance for Austria,⁽⁵⁾ Denmark,⁽³³⁾ Finland,⁽³⁶⁾ Ireland,⁽³⁷⁾ Norway,⁽²⁶⁾ and England⁽²¹⁾ states that advice and or orders may be introduced based on the current infection situation, or when there are a lot of respiratory viruses circulating, such as in autumn and winter. Germany,⁽⁶⁾ Scotland⁽²⁹⁾ and Australia⁽¹⁸⁾ will introduce a face mask requirement for a range of public indoor settings (particularly when physical distancing cannot be maintained) and on public transport, when necessary.

There are limitations relevant to this report that should be noted. Although a comprehensive search of international resources was undertaken, it is anticipated that further public health COVID-19 surge plans and related documents will become available in the coming weeks. These are likely to include information on the use of face masks to mitigate the spread of SARS-CoV-2 infection. Details on mask use for those in isolation may not have been included in the sources identified in this search, which may have solely been addressed in isolation guidance. To the best of our knowledge, the review is accurate as of 30 November 2022.

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Appendix 1 Definition of risk groups for each organisation or country

| Organisations | |
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| ECDC | |
| <p>Organisation: European Centre for Disease Prevention and Control (ECDC) Title: High-risk groups for COVID-19⁽³⁹⁾ Date published/updated: unavailable</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ▪ aged 60 years and older; ▪ living in long-term care facilities ▪ with underlying health conditions, such as: <ul style="list-style-type: none"> ○ hypertension ○ diabetes ○ cardiovascular disease ○ chronic respiratory disease ○ weakened immune systems. |
| WHO | |
| <p>Organisation: World Health Organization (WHO) Title: COVID-19: vulnerable and high risk groups⁽⁴⁰⁾ Date published/updated: Not available</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ▪ aged 60 years or older ▪ with lung or heart disease ▪ with diabetes ▪ with conditions that affect their immune system. |
| US CDC | |
| <p>Organisation: US Centers for Disease Control and Prevention (CDC) Title: Understanding Risk⁽⁴¹⁾ Date published/updated: 11 August 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals: that are aged 65 and older:</p> <ul style="list-style-type: none"> ▪ who are immunocompromised ▪ with asthma ▪ with medical conditions ▪ who are pregnant. |
| EU/EEA | |
| Austria | |
| <p>Organisation: Federal Ministry of Social Affairs, Health, Care and Consumer Protection</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals with advanced functional or structural chronic lung diseases that require permanent, daily, dual medication such as individuals with:</p> <ul style="list-style-type: none"> ▪ pulmonary hypertension |

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| <p>Title: Consolidated Federal Law: Entire legislation for the COVID-19 Risk Group Ordinance⁽⁴²⁾</p> <p>Date published/updated: 11 July 2022</p> | <ul style="list-style-type: none"> ■ mucoviscidosis/cystic fibrosis as well ■ COPD in the advanced stag ■ chronic heart disease with end-organ damage that requires long-term therapy, such as: <ul style="list-style-type: none"> ○ ischemic heart disease as well ○ heart failure. ■ active cancer with oncological pharmacotherapy (chemotherapy, biologicals) and/or radiation therapy within the last six months ■ metastatic cancer even without ongoing therapy ■ diseases that need to be treated with permanent and relevant immunosuppression, such as: <ul style="list-style-type: none"> ○ bone marrow transplantation within the last two years or under immunosuppressive therapy or with graft vs. host disease ○ organ transplantation within the last year or under immunosuppressive therapy or with graft vs. host disease ○ permanent cortisone therapy > 20 mg or prednisone equivalent/day for more than two weeks, ○ immunosuppression with cyclosporine, tacrolimus, mycophenolate azathioprine, methotrexate tyrosine kinase inhibitors, ongoing biological therapy (in the case of non-oncological diagnosis) ○ HIV with high viral load. ■ advanced chronic kidney disease such as: <ul style="list-style-type: none"> ○ chronic renal failure with glomerular filtration rate < 45 ml/min, ○ in renal replacement therapy and ○ post kidney transplant. ■ chronic liver disease with organ remodeling and decompensated liver cirrhosis from Childs stage B ■ pronounced obesity from obesity grade III with a BMI >= 40 ■ diabetes mellitus <ul style="list-style-type: none"> ○ Type I with regularly elevated HBA1c > 7.5%, ○ Type II with regularly elevated HBA1c > 8.5% ○ Type I or II with end-organ damage. ■ arterial hypertension with existing end-organ damage, especially chronic cardiac or renal insufficiency, or uncontrollable blood pressure. |
| Belgium | |
| | No information identified. |
| Czechia | |
| <p>Organisation: Czech Government</p> <p>Title: Vaccine indication for selected groups⁽⁴³⁾</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals with:</p> <ul style="list-style-type: none"> ■ comorbidities ■ hypertension |

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| <p>Date published/updated: 13 August 2022</p> | <ul style="list-style-type: none"> ■ diabetes mellitus ■ asthma ■ lung ■ liver and renal diseases ■ chronic (stabilized and well-controlled) HIV, HCV, and HBV infection. <p>Risk groups also include individuals that are:</p> <ul style="list-style-type: none"> ■ immunocompromised ■ have autoimmune diseases ■ are pregnant women. |
| Denmark | |
| <p>Organisation: Danish Health Authority Title: Guidance for people at higher risk⁽⁴⁴⁾ Date published/updated: 23 June 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ■ aged 80 years and older ■ aged 65-79 who have chronic diseases or reduced mental and physical health ■ under 65 who have: <ul style="list-style-type: none"> ○ chronic diseases ○ overweight ○ weakened immune system. ■ who are children and young people who have chronic illness ■ who are residents in nursing homes ■ who are pregnant women. |
| Finland | |
| <p>Organisation: Finnish Institute of Health and Welfare Title: Risk groups for severe coronavirus disease⁽⁴⁵⁾ Date published/updated: unavailable</p> | <p>There are two risk groups for severe COVID-19 disease in Finland. Group 1 include those aged 12 and over with an illness or condition that is highly predisposing to severe coronavirus disease. This includes the following conditions:</p> <ul style="list-style-type: none"> ■ organ transplant or stem cell transplant ■ individuals undergoing active cancer treatment (excluding surgery alone or treatments that do not affect the immune system such as adjuvant hormone therapy) ■ severe disorders of the immune system ■ severe chronic renal disease ■ severe chronic pulmonary disease ■ type 2 diabetes with medication ■ down syndrome. |

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| | <p>Group 2 includes those aged 12 and over with an illness or condition that is predisposing to severe coronavirus disease. This includes the following conditions:</p> <ul style="list-style-type: none"> ▪ asthma requiring continuous medication ▪ severe heart disease ▪ neurological illness or condition that affects breathing ▪ immunosuppressive drug therapy for autoimmune disease ▪ severe chronic liver disease ▪ type 1 diabetes or adrenal insufficiency ▪ sleep apnoea. |
| France | |
| <p>Organisation: Government of France Title: Coronavirus information⁽²³⁾ Date published/updated: 27 September 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals who are:</p> <ul style="list-style-type: none"> ▪ elderly ▪ immunocompromised ▪ chronically ill ▪ pregnant women. |
| Germany | |
| <p>Organisation: Federal Ministry of Health Title: Basic knowledge about coronavirus⁽⁴⁶⁾ Date published/updated: 23 June 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ▪ over the age of 60 ▪ with chronic respiratory or pulmonary diseases ▪ with coronary diseases ▪ with high blood pressure ▪ with cancer ▪ with diabetes mellitus ▪ receiving immunosuppressant medication. |
| Ireland | |
| <p>Organisation: Health Service Executive Title: People at higher risk from COVID-19⁽⁴⁷⁾ Date published/updated: 31 August 2022</p> | <p>Serious illness means that you may need to go to hospital, an intensive care unit (ICU), or be put on a ventilator to help you breathe. There is also a risk of death. Risk is divided into two groups: those at very high risk and those at high risk of becoming severely ill due to COVID-19.</p> <p>Groups that are at very high risk include individuals that:</p> <ul style="list-style-type: none"> ▪ have Down syndrome ▪ have cancer and are being treated with (or within 6 weeks of) chemotherapy or targeted therapy, monoclonal antibodies or immunotherapies ▪ have lung or head and neck cancer and are having (or within 6 weeks of) radical surgery or radiotherapy |

- are having certain complex cancer surgery, for example, surgery for lung cancer, head and neck cancer or oesophageal cancer
 - getting treatment or pending treatment for a cancer of blood or bone marrow
 - have advanced cancer or cancer that has spread to another part of the body
 - are on dialysis or have end-stage kidney disease and an eGFR less than 15
 - have a condition affecting the brains or nerves that has significantly affected your ability to breathe, meaning you require non-invasive ventilation (such as motor neurone disease or spinal muscular atrophy)
 - have unstable or severe cystic fibrosis, including people waiting for a transplant
 - have severe respiratory conditions including Alpha-1 antitrypsin deficiency, pulmonary fibrosis, lung fibrosis, interstitial lung disease and severe COPD
 - have uncontrolled diabetes
 - have had an organ transplant or are waiting for a transplant
 - have had a bone marrow or stem cell transplant in the last 12 months, or are waiting for a transplant
 - have a rare genetic condition that means you have a very high risk of getting infections (such as APECED or errors in the interferon pathway)
 - sickle cell disease
 - have been treated with drugs such as Rituximab, Cyclophosphamide, Alemtuzumab, Cladribine or Ocrelizumab in the last 6 months
 - have certain inherited metabolic disorders (such as Maple Syrup Urine Disease)
 - have obesity with a body mass index (BMI) greater than 40.
- Groups that are at high risk 19 include individuals that:
- have a learning disability other than Down syndrome
 - are being treated for cancer but are not very high risk
 - have been treated in the past 5 years for a cancer of the blood or bone marrow (such as leukaemia, lymphoma or myeloma)
 - have been treated in the past 1 year with immunomodulating treatment for a cancer that did not start in the blood or bone marrow
 - have chronic heart disease (such as heart failure)
 - have chronic kidney disease with an eGFR below 30ml a minute
 - have chronic liver disease (such as cirrhosis or fibrosis)
 - have a condition affecting the brain or nerves (such as Parkinson's disease or cerebral palsy) that affects their breathing or ability to protect or clear their airway
 - have clinically stable cystic fibrosis

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| | <ul style="list-style-type: none"> ▪ have a serious lung condition but are not at very high risk, for example, severe asthma, moderate COPD, emphysema or bronchitis ▪ have diabetes ▪ are taking medicine that makes your immune system weak (such as high doses of steroids) ▪ have a condition that means you have a high risk of getting infections (such as lupus, scleroderma, or HIV when not on treatment or CD4 count <200) ▪ have an inherited metabolic disorder but are not very high risk ▪ have obesity with a body mass index (BMI) between 35 and 40 ▪ have a severe mental illness (such as schizophrenia, bipolar disorder, severe depression). |
| Italy | |
| <p>Organisation: Ministry of Health Title: What are SARS-CoV-2 and Covid-19⁽⁴⁸⁾ Date published/updated: 23 August 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ▪ aged 60 years and older ▪ with high blood pressure ▪ with heart problems ▪ with diabetes ▪ with chronic respiratory disease ▪ with cancer ▪ who are immunosuppressed. |
| Netherlands | |
| <p>Organisation: National Institute for Public Health and the Environment Title: Risk groups and COVID-19⁽⁴⁹⁾ Date published/updated: 6 September 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ▪ aged 70 years or older ▪ with chronic heart diseases ▪ with diabetes ▪ with kidney disease ▪ receiving immunosuppressant medicine ▪ who have undergone or are undergoing organ or stem cell transplant ▪ who have undergoing cancer treatment such as chemotherapy or radiation ▪ with severe immune disorders ▪ with HIV infection untreated or cluster of differentiation (CD4) below 200/mm² ▪ with serious liver disease ▪ with morbid obesity ▪ with Down syndrome. |
| Norway | |

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| <p>Organisation: Norwegian Institute of Public Health Title: Risk groups and their relatives - advice and information⁽⁵⁰⁾ Date published/updated: 7 April 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ▪ who are unvaccinated (light-moderate/moderate-high risk), including unvaccinated pregnant women ▪ who are over 65 who are vaccinated with two doses, where more than 6 months have passed since the last dose, until 1 week after a booster dose ▪ with chronic liver condition or considerably impaired liver function ▪ who are being treated with immunosuppressive therapy such as autoimmune diseases ▪ diabetes ▪ with chronic liver conditions including cystic fibrosis and severe asthma where high doses of inhalation steroids or steroid tablets have been used during the last year ▪ who are obese with body mass index (BMI) at 35 kg/m² or higher ▪ with dementia ▪ with chronic cardiovascular disease (except high blood pressure) and stroke ▪ with Down's Syndrome ▪ with neurological conditions or muscle conditions resulting in reduced lung capacity or capacity to cough (for example ALS and cerebral palsy) ▪ with chronic kidney illness or failure (see below for serious kidney failure) ▪ who are undergoing or have undergone organ transplantation ▪ who are diagnosed with severe or moderate immune deficiency ▪ with haematological cancer during the last five years ▪ who have other active cancer, ongoing or recently ended cancer treatment (especially immunosuppressive therapy, radiotherapy on lungs or chemotherapy) ▪ with serious kidney failure (stage 5) or are on active dialysis ▪ who are considered to have significant immune deficiency. |
| Portugal | |
| <p>Organisation: National Health Service Portugal (SNS) Title: COVID-19⁽¹²⁾ Date published/updated: 24 October 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ▪ aged 70 years or over ▪ with severe immunosuppression ▪ with chronic illnesses such as: <ul style="list-style-type: none"> ○ lung diseases ○ heart diseases ○ chronic kidney disease on hemodialysis ○ hepatic cirrhosis ○ diabetes ○ obesity ○ Down syndrome |

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| | <ul style="list-style-type: none"> ○ sickle cell disease. |
| Spain | |
| | No information available. |
| Sweden | |
| <p>Organisation: Public Health Agency of Sweden</p> <p>Title: Groups at risk of serious illness⁽⁵¹⁾</p> <p>Date published/updated: 21 January 2021</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ■ aged 70 and older ■ who have undergone or are undergoing organ transplantation ■ with blood cancers ■ with neurological diseases that affect respiratory functions ■ who are obese (risk increases with increased levels of obesity) ■ with diabetes (reduced risk if well controlled) ■ with ongoing cancer treatment ■ with chronic pulmonary diseases ■ with stroke/dementia ■ with other immunosuppression caused by disease or treatment ■ with liver disease ■ with impaired kidney function ■ with cardiovascular disease including hypertension. |
| Non EU/EEA | |
| England | |
| <p>Organisation: National Health Service (NHS)</p> <p>Title: Who is at high risk from coronavirus (COVID-19)⁽⁵²⁾</p> <p>Date published/updated: 23 June 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals with:</p> <ul style="list-style-type: none"> ■ Down syndrome ■ certain types of cancer (such as a blood cancer like leukaemia or lymphoma) ■ sickle cell disease ■ certain conditions affecting your blood ■ chronic kidney disease (CKD) stage 4 or 5 ■ severe liver disease ■ who had an organ or bone marrow transplant ■ certain autoimmune or inflammatory conditions (such as rheumatoid arthritis or inflammatory bowel disease) ■ HIV or AIDS and have a weakened immune system ■ a condition affecting your immune system |

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| | <ul style="list-style-type: none"> ▪ a rare condition affecting the brain or nerves (multiple sclerosis, motor neurone disease, Huntington’s disease or myasthenia gravis) ▪ a severe problem with the brain or nerves, such as cerebral palsy ▪ severe or multiple learning disabilities (or you're on the learning disability register) ▪ a weakened immune system due to a medical treatment (such as steroid medicine, biological therapy, chemotherapy or radiotherapy). <p>Risk can also be affected if an individual is:</p> <ul style="list-style-type: none"> ▪ aged 60 years or older ▪ pregnant ▪ not vaccinated against COVID-19. |
| Northern Ireland | |
| | No information available. |
| Scotland | |
| <p>Organisation: Scottish Government Title: Coronavirus (COVID-19) advice for people on the Highest Risk List: evidence review⁽⁵³⁾ Date published/updated: 27 April 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ▪ who are undergoing or have undergone organ transplantation ▪ with cancer ▪ who are immunosuppressed. |
| Wales | |
| <p>Organisation: Welsh Government Title: People at increased risk from coronavirus⁽⁵⁴⁾ Date published/updated: unavailable</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ▪ aged 70 or older (regardless of medical conditions) ▪ under 70 with an underlying health condition listed below (i.e. anyone instructed to get a flu jab as an adult each year on medical grounds): <ul style="list-style-type: none"> ○ chronic (long-term) respiratory diseases, such as asthma, chronic obstructive pulmonary disease (COPD), emphysema or bronchitis ○ chronic heart disease, such as heart failure ○ chronic kidney disease ○ chronic liver disease, such as hepatitis ○ chronic neurological conditions, such as Parkinson’s disease, motor neurone disease, multiple sclerosis (MS), a learning disability or cerebral palsy ○ diabetes ○ problems with your spleen – for example, sickle cell anaemia or if you have had your spleen removed |

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| | <ul style="list-style-type: none"> ○ a weakened immune system as the result of conditions such as HIV and AIDS, or medicines such as steroid tablets or chemotherapy ○ being seriously overweight (a body mass index (BMI) of 40 or above) ○ who are pregnant. |
| Australia | |
| <p>Organisation: Australian Government Title: Risk factors for more serious illness⁽⁵⁵⁾ Date published/updated: 15 March 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ■ aged 70 years or older ■ who are unvaccinated ■ those undergoing the following treatments: <ul style="list-style-type: none"> ○ immune suppressive therapy ○ chemotherapy ○ radiotherapy ○ immunotherapy ○ targeted anti-cancer therapy ○ bone marrow transplant. ■ with illnesses and conditions that increase the risk of developing severe illness include: <ul style="list-style-type: none"> ○ blood cancer (such as leukaemia, lymphoma or myelodysplastic syndrome) ○ non-haematological cancer (diagnosed in the past 5 years) ○ childhood cancer ○ chronic inflammatory condition requiring medical treatment ○ primary or acquired immunodeficiency ○ chronic renal (kidney) failure ○ chronic lung disease ○ heart disease (coronary heart disease or failure) ○ diabetes ○ chronic liver disease ○ neurological conditions such as stroke or dementia ○ severe mental health condition ○ severe obesity (BMI ≥ 40 kg/m²) ○ poorly controlled blood pressure. |
| Israel | |
| <p>Organisation: Ministry of Health Title: Coronavirus (Covid-19) Frequently Asked Questions⁽⁵⁶⁾ Date published/updated: unavailable</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ■ aged 65 and over ■ who are residents of nursing homes and assisted living facilities ■ with an acute heart condition |

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| | <ul style="list-style-type: none"> ■ with acute chronic lung condition ■ with diabetics ■ with dialysis ■ with cirrhosis of the liver ■ with immunosuppression for any number of causes ■ suffering from morbid obesity. |
| New Zealand | |
| <p>Organisation: Ministry of Health Title: COVID-19: Higher risk people⁽⁵⁷⁾ Date published/updated: 26 August 2022</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none"> ■ with compromised immunity ■ with high risk medical conditions such as: <ul style="list-style-type: none"> ○ chronic lung or airways disease ○ serious heart conditions such as congestive heart failure, coronary artery disease, rheumatic heart disease, and congenital heart disease ○ hypertension ○ chronic neurological or neuromuscular disease ○ diabetes ○ chronic kidney disease ○ severe liver disease such as cirrhosis ○ severe haematological disorders ○ severe mental illness such as schizophrenia, major depressive disorder, bipolar or schizoaffective disorder ○ active cancer ○ morbid obesity (BMI greater than 35) ○ sickle cell disease ○ Down syndrome. ■ in aged care facilities ■ who are pregnant ■ or children at higher risk such as those under the age of 1 month, under the age of 2 born premature, those with multiple chronic conditions ■ with a disability ■ with mental health conditions and addictions ■ of Maori and Pacific ethnicity ■ who smoke. |
| Singapore | |

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| <p>Organisation: Ministry of Health Singapore Title: Who is vulnerable⁽⁵⁸⁾ Date published/updated: unavailable</p> | <p>Risk groups are those more likely to develop severe forms of COVID-19. This includes individuals:</p> <ul style="list-style-type: none">▪ who are aged 60 and above▪ who are immunocompromised or have concurrent medical conditions such as:▪ with obesity (BMI > 31)▪ with hypertension▪ with diabetes▪ with chronic heart and lung diseases▪ with kidney diseases on dialysis▪ with hypercoagulable states▪ with cancer▪ who are immunosuppressed▪ who are pregnant women▪ with Down syndrome. |
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